

# TABLE

Page	Section	Comment
4	II.B – Facility Description	The City requests that Reclamation District 777 Lateral Drain No. 1 be identified as Reclamation District 777 constructed agricultural Drain No. 1. This is a generic comment and is requested that the changes be made in all instances.
4	II.B – Facility Description	The City requests that the following language be incorporated in the second paragraph: “Cease and Desist Order No. R5-2009-0012-01 includes a time schedule <i>and interim effluent limits . . .</i> ”
10	Table 6 – pH	The City requests that the instantaneous maximum effluent limitation be changed from 8.5 to 8.0 upon completion and start-up of the new facility. With the new oxidation ditch WWTP, the effluent pH is not expected to exceed 7.5, and should never exceed 8.0. This would be consistent with other adopted Central Valley Water Board Orders (i.e., City of Jackson, Donner Summit PUD, City of Auburn, and Angels Camp). There are no known instances of similar facility effluent pH of over 8.0 without the addition of chemicals to artificially raise the pH. The City of Live Oak does not plan to use any chemicals that would raise the pH above normal operating levels. pH dependent effluent limits should be recalculated at a maximum pH of 8.0 and the effluent limit for pH should be amended accordingly.
10	IV.A.1 and Table 6 – Copper and Cadmium	Effluent limits should be recalculated and reasonable potential determined based on the proper use of the Emerick 2006 study as described in more detail in an attached memorandum from Dr. Robert Emerick dated August 24, 2010.
11	IV.A.1 and Table 6 – Footnote 1	The footnote should be changed to read: “Based on 1.4 mgd average permitted dry weather flow. Compliance with the mass effluent limitations will be determined during average dry weather periods only when groundwater is at or near normal and runoff is not occurring.”
12	IV.A.2.b – Mercury	Mercury annual mass limit should be 0.071 lbs based on annual average flow of 1.73 mgd, not the annual dry weather flow of 1.4 mgd.
12	IV.A.2.c – Ammonia	The compliance date should be changed to reflect the most recent infeasibility report provided with these comments.
24	VI.C.4.a – Turbidity	These limits should apply only after September 30, 2012, which is when construction of the new treatment facility should be completed.
27	VI.C.6.c – Other Special Provisions	This section should be properly labeled VI.C.6.a.
27	VI.C.7.a – Compliance Schedules	Final compliance date of September 1, 2015, should be extended to September 1, 2017, for consistency with the revised Infeasibility Report submitted August 26, 2010.
C-1	Flow Schematic	This Diagram should be noted that it is the new plant currently under construction.

<b>Page</b>	<b>Section</b>	<b>Comment</b>
E-4	II Table E-1	<p>Table E-1 should be modified to recognize that the current plant will be in service until September 30, 2012. Sampling locations should be identified for the current pond facility.</p> <p>Sample locations identified in Table E-1 will be appropriate upon start-up of the new facility and should be appropriately noted.</p> <p>The City intends for the new facility to discharge to Reclamation District 777 constructed agricultural Drain No. 2. The current facility discharges to Reclamation District 777 constructed agricultural Drain No. 1. The Table should be modified to properly reflect the potential change in discharge location upon completion of the new facility by September 30, 2012.</p>
E-5	IV.A.1 Table E-3	<p>Turbidity is required to be monitored on a continuous basis. Meters will be installed on the new facility. Until the new facility is on line, continuous measurements should be indicated as a grab. Footnote 10 should reflect the use of grab samples or be removed.</p> <p>Upon removal of the MUN designation, the following constituents should be removed: Aluminum, Arsenic, Nitrate, Dibromochloromethane, Dichlorobromomethane, Total Trihalomethane, Iron, and Manganese.</p> <p>Upon proper utilization of the concave convex curve and hardness, Copper and Cadmium should be removed.</p>
E-5	IV.A.1 Table E-3 – Electrical Conductivity	<p>Frequency is noted as once per week with a reference to footnote 9. Footnote 9 is not applicable to electrical conductivity.</p>
E-5	IV.A.1 Table E-3 – Chlorine Residual	<p>Chlorine residual reference footnote 8 requires monitoring one week prior to the scheduled use of chlorine. There may be times when chlorine would be added for process control of filamentous bacteria control without a one-week notice. It is recommended that the footnote be modified to require monitoring starting on the first day of use of chlorine and end one day after suspension of chlorine use.</p>

<b>Page</b>	<b>Section</b>	<b>Comment</b>
E-11	VIII.A.1 Table E-6	<p>As indicated previously, the City is considering changing its discharge location to constructed agricultural Drain No. 2. Thus, Table E-6 should be modified to recognize that the current facility discharges to Reclamation District 777 constructed agricultural Drain No. 1 and may be changing to Reclamation District 777 constructed agricultural Drain No. 2 upon completion of the new facility by September 2012. At that point, RSW-001 and RSW-002 will need to be relocated.</p> <p>Both Reclamation District 777 constructed agricultural Drain No. 1 and Reclamation District 777 constructed agricultural Drain No. 2 at times do not have a flow at upstream locations. Water may pond as tail water, but does not have a downstream directional flow. Table E-6 should be modified to recognize that there may be times when it is not possible to collect an upstream flowing sample, in which case only a downstream sample should be required.</p>
E-12	IX.B.1.a – Pond and Lagoon Monitoring	It is recommended that the following sentence be added: “Ponds shall be considered to be in use if there is one foot or more of water covering the entire pond or lagoon bottom.”
E-13	IX.C.1.a – Equalization Basin and Emergency Storage Basin Monitoring	It is recommended that the following sentence be added: “Ponds shall be considered to be in use if there is one foot or more of water covering the entire basin bottom.”
E-13	IX.D.1 Table E-8	Language should be added to reflect that the new UV facility is not required to be on line until September 2012 and monitoring is not required until the facility is in service.
E-14	X.A.2 – General Reporting	It is recommended that the number of years of historical data be limited to five years.
E-16	X.B.3.b – Mass Loading Limitation	It is recommended that the language be consistent with Limitations and Discharge Requirements Section VII.H (page 29).
E-16	X.B.3.h & i – Receiving Water Limitations	Both Reclamation District 777 constructed agricultural Drain No. 1 and Reclamation District 777 constructed agricultural Drain No. 2 at times do not have a flow at upstream locations. Water may pond as tail water, but does not have a downstream directional flow. These items should be modified to recognize that there may be times when it is not possible to collect an upstream flowing sample, in which case only a downstream sample will be collected. In that case, it should be noted that it is not possible to calculate compliance. The ponded water is not representative of flowing water.

Page	Section	Comment
E-19	X.D.4	This, and subsequent numbered sub-sections should be numbered consecutively starting with X.D.1.
E-20	X.D.5	Effluent and receiving water monitoring should be specified as required during the 3 <sup>rd</sup> year of the permit term, not 3 <sup>rd</sup> or 4 <sup>th</sup> year, for consistency with Tables E-3 and E-6.
F-4	II – Facility Description	The City requests that the following language be incorporated in the second paragraph: “Cease and Desist Order No. R5-2009-0012-01 includes a time schedule <i>and interim effluent limits</i> . . . .”
F-5	II.B.2 & 3 – Discharge Points and Receiving Waters	<p>The upgraded wastewater treatment may relocate its discharge point from the current location to a location on Reclamation District 777 constructed agricultural Drain No. 2. Thus, all references to the discharge location after completion of the new facility may need to be changed to Reclamation District 777 constructed agricultural Drain No. 2.</p> <p>Reclamation District 777 constructed agricultural Drain No. 1 flows to the East Interceptor Canal. All references to the Live Oak Slough, Main Canal should be deleted. The East Interceptor Canal is a tributary to the Wadsworth Canal until the Wadsworth Canal enters the Sutter Bypass.</p>
F-13	IV.B.2.b – Flow	It is requested that the following language be added: “The new facility design capacity for peak day, peak week, peak month and annual average flows are 4.27 MGD, 3.80 MGD, 3.33 MGD and 1.73 MGD, respectively.” These flows represent design capacity of the new facility and annual average flow is required to calculate annual mass loading rates.
F-16	IV.C.2.b – Effluent and Ambient Background	The last paragraph—all sentences other than the first should be deleted, and the following added: “Though the effluent data show detections for these constituents, the detections do not exceed the criteria; therefore, there is no reasonable potential to cause or contribute to exceedances of these criteria.”
F-18	IV.C.2.c – Hardness Dependent CTR Criteria	Please see the attached memorandum from Dr. Robert Emerick to Bill Lewis dated August 24, 2010. Several changes to the Fact Sheet are needed to incorporate a single and unified regulatory approach that follows the CTR and the SIP and is applicable to all metals—in particular Copper and Cadmium for this permit.
F-28	IV.C.3.d.i(d) – Aluminum	Plant Performance and Attainability. The section states that the City may request a compliance schedule for aluminum. An Infeasibility Report was submitted to the CVRWQCB staff on July 19, 2010, and a revised report on August 26, 2010. The report was acknowledged as appearing to be complete. The report included a request for an aluminum compliance schedule. The Fact Sheet should be corrected to include the correct information and a compliance schedule should be added to the permit. Pursuant to the Infeasibility Report, compliance with the annual criteria is not known at this time.

<b>Page</b>	<b>Section</b>	<b>Comment</b>
F-28	IV.C.3.d.ii – Ammonia	With the new oxidation ditch WWTP, the effluent pH is not expected to exceed 7.5, and should never exceed 8.0. It is also anticipated that the effluent temperature will be lower due to lower exposure to solar heating in the current pond facility. The fixed effluent ammonia limitations should be recalculated based on a pH of 8.0 and a lower effluent temperature. An August 26, 2010, revised Infeasibility Report is attached indicating that a longer compliance schedule is required to meet the proposed ammonia limits. Please see the attached report. Upon receipt of the Tentative Permit, City staff requested a more complete review by an engineering firm outlining the time to reach compliance. This review indicates compliance cannot be reliably obtained until September 2017.
F-29	IV.C.3.ii(b) – Ammonia	It is stated that, “The discharger does not currently use nitrification to remove ammonia from the waste stream.” It should be noted that the new tertiary facility, currently under construction, includes nitrification.
F-30	IV.C.3.iii(c) – Mercury	The mercury mass limitation should be 0.071 lbs/year, based on average annual flow, not ADWF.
F-32	IV.C.3.v(d) – Nitrate	The new facility does not include denitrification, as outlined in the Fact Sheet on page F-4, section II – Facility Description. The July 19, 2010, Infeasibility Report and August 26, 2010, revised report presented a time line for compliance. It is requested that an interim limit be provided and an in-permit time schedule be implemented.
F-34	IV.C.3.ix – Copper	Effluent limits should be recalculated and reasonable potential determined based on the proper use of the Emerick 2006 study as described in more detail in the attached memorandum from Dr. Robert Emerick dated August 24, 2010.
F-35	IV.C.3.x(d) – Arsenic	There is no information in the Plant Performance and Attainability section. The July 19, 2010, Infeasibility Report and August 26, 2010, revised report presented a time line for compliance. It is not currently known if the new plant will have the same removal efficiencies as the current facility. The new facility was not designed to remove this newly identified constituent that was not listed in the current permit with effluent limits. It is requested that an interim limit be provided and an in-permit time schedule be implemented.
F-35	IV.C.3.xii – Cadmium	Effluent limits should be recalculated and reasonable potential determined based on the proper use of the Emerick 2006 study as described in more detail in the attached memorandum from Dr. Robert Emerick dated August 24, 2010.
F-36	IV.C.3.xiv(d) – Chlorinated Hydrocarbons	The Fact Sheet recognizes that the facility may be able to meet the effluent limits. Due to the ever decreasing MDL’s achieved by laboratories, this is a new more stringent effluent limit and an interim limit and time schedule should be established. At the very least, it is a new, more stringent limit eligible for protection from MMPs in the Cease and Desist Order.

Page	Section	Comment
F-39	IV.C.3.xvi – pH	This section should be modified to be consistent with an instantaneous maximum pH limitation of 8.0 (see page 10 note above). The July 19, 2010, Infeasibility Report requested a maximum pH limit of 8.0. The Fact Sheet does not include any basis for denying the request. There are no known similar wastewater facilities that have exceeded a pH 8.0 unless excessive basic chemicals were added to the collection or treatment process. The City does not have plans to use these basic chemicals.
F-40	IV.C.3.xvii – Salinity	The City recently instituted a potable water metering program. Water meters have been installed on all connections served by the City. Water usage has significantly dropped. It is not yet known what the long term implications will be to salinity concentrations. Based on the significant reduction in water use, it is not clear that historical values for salinity will be representative of future concentrations. It is also not known if there will be removal efficiencies for the new plant versus the current facility. The July 19, 2010, Infeasibility Report and August 26, 2010, revised report presented a time line for compliance.
F-43	IV.C.3.xvii(c) – WQBELs	It is requested that the following sentence be added to the end of the first full paragraph on page F-43: “. . . of the rolling 12-month average effluent concentration from July 2005 through June 2008. <i>The City has instituted complete potable water metering of their system resulting in significant reduction in water usage. At this time it is not known what the 99.9 percentile EC value will be.</i> ”
F-45	Table F-11 – Ammonia	This table should be modified based on MEC pH of 8.0 (see page 10 note above).
F-45	Table F-12 – Copper	Effluent limits should be recalculated and reasonable potential determined based on the proper use of the Emerick 2006 study as described in more detail in the attached memorandum from Dr. Robert Emerick dated August 24, 2010.
F-46	Table F-13 – Cadmium	Effluent limits should be recalculated and reasonable potential determined based on the proper use of the Emerick 2006 study as described in more detail in an attached memorandum from Dr. Robert Emerick dated August 24, 2010.
F-48	IV.D.1 – Mass Based Limits	Recognition of mercury mass limit calculation should be added. Mercury annual mass limit should be 0.071 lbs based on annual average flow of 1.73 mgd, not the annual dry weather flow of 1.4 mgd.
F-53	IV.E.1 & 2 – Ammonia Compliance Schedule and Interim Limit	A revised Infeasibility Report is attached indicating that a longer compliance schedule is required to meet the proposed ammonia limits. Please see the attached report. Upon receipt of the Tentative Permit, City staff requested a more complete review by an engineering firm outlining the time to reach compliance. This review indicates compliance cannot be reliably obtained until September 2017.

<b>Page</b>	<b>Section</b>	<b>Comment</b>
F-66	VIII.B – Written Comments	The comments were noticed to be due on August 27, 2010. However, due to furloughs, the comment deadline was extended until Monday, August 30, 2010.